# BROOKHAVEN NATIONAL LABORATORY Safety & Health Services Division INDUSTRIAL HYGIENE GROUP Standard Operating Procedure: Program Procedure Subject: SHSD IH Group Role in Delivery of the BNL Industrial Hygiene Program 1 of 6

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#### 1.0 Purpose & Scope

**Purpose**: This procedure describes the overall scope of the BNL Industrial Hygiene (IH) program and identifies the IH Group's specific role in the program. This document assists management in developing, implementing and coordinating an effective IH program that, as a minimum, complies with OSHA 29CFR1910 and 1926 and DOE Order 440.1A. This SOP describes the role and duties assigned to the IH Group in IH50100 *BNL's Industrial Hygiene Program*.

**Scope**: This document describes program elements necessary for compliance with BNL policies, OSHA and DOE regulations.

#### 2.0 Responsibilities

2.1 The BNL program is implemented through the Industrial Hygiene Manager who assigns designees to serve as the *BNL Industrial Hygiene Element Program Administrators*.

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2.2 The *BNL Industrial Hygiene Element Administrator* is the *Subject Matter Expert* and holds general responsibility to monitor the effectiveness of the BNL Industrial Hygiene element Program.

#### 3.0 <u>Definitions</u>

*Industrial Hygiene Program Element*: A topic within the generally accepted field known as Industrial Hygiene (a.k.a. Occupational and Environmental Health) that is regulated by DOE Order or OSHA regulation or that is otherwise recognized as a hazard at BNL and is assigned to the Industrial Hygiene program.

*Industrial Hygiene Program Administrator*: A person, designated by the Industrial Hygiene Manager, to oversee compliance with the BNL policies, DOE Orders and OSHA regulations on Industrial Hygiene programs for SHSD and BNL as a whole.

#### 4.0 Prerequisites

none

#### 5.0 Precautions

none

#### **6.0 Procedure** (Program Elements)

The IH Group serves in the following roles:

	Primary Role(s)		
1.	Serves as Industrial Hygiene element Program Administration & SBMS Subject		
	Matter Expert.		
2.	Conducts periodic Regulatory Driver tracking.		
3.	Performs periodic BNL Program Self Assessment.		
4.	Prepares Standard Operating Procedures for Program Administration.		

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- 5. Conducts advanced (complex) exposure monitoring and engineering control surveys for and with the assistance of RCD.
- 6. Maintains an Exposure Monitoring Record database.
- 7. Calibrates and Maintains Exposure Monitoring Equipment.
- 8. Reviews or assists in developing training material.
- 9. Maintains site wide support programs such as CMS, Respirator Fit Testing and heat stress monitoring.
- 10. Performs Project Design Reviews for H&S impact on workers
- 6.1 **Program Administration:** The IH Manager's shall designate a Program Administrator. This role will be filled by a professional Industrial Hygienist with the IH Group who has sufficient knowledge of health & safety hazards, BNL operations, and OSHA and DOE drivers. This individual will also serve as the BNL Subject Matter Expert for the Industrial Hygiene *Program Element*.
- 6.2 **Regulatory Driver Tracking:** The Program Administrator shall maintain mechanisms to track the status of DOE, OSHA, ANSI, NIOSH and ACGIH regulations and guidance to assess their impact on the BNL Program and shall initiate corrective action for any gaps in the BNL program resulting from changes in the reference and regulatory documents. Review of checks on the status of regulatory drivers will be formally documented.
- 6.3 **Periodic BNL Program Self-Assessment:** The Program Administrator shall periodically review the BNL Program to assess compliance with regulatory drivers and determine the overall effectiveness of the program. The periodic evaluation shall occur at least each 3 years and shall ensure that all program aspect are conducted to meet the requirements in the OSHA and DOE drivers. Records of the assessment will be maintained for a minimum of 75 years in the SHSD IH Laboratory record system and the BNL/ESHQ Document Logging system.
- 6.4 **Preparation of Procedures for Program Administration:** The IH Group develops and revises Standard Operating Procedures and Recordkeeping forms for the advanced health & safety hazard assessments and exposure monitoring they conduct. These procedures are maintained on the SHSD IHG Internet website for access by all organizations performing tasks covered by the documents. The IH Group may also prepare procedures describing general health & safety exposure

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assessment principles, specific instrument operation instruction, and calibration protocols and techniques.

- 6.5 **Conduct advanced (complex) surveys:** The IH Group maintains the expertise to conduct advanced or complex health & safety surveys following the IH Group Standard Operating Procedures. IH Group evaluations are made to analyze potential employee and community health & safety exposure from BNL operations as well as obtain the data necessary for development of effective administrative and engineering controls.
- 6.6 **Maintenance of Exposure Monitoring Database:** The IH Group maintains an electronic database that compiles information from written field survey forms, printout of meter logged data, and other appropriate written records. All organizations at BNL that conduct area surveys and personal dosimetry are to provide the SHSD IHG with the original of written record for storage in this system.
- 6.7 Calibration and Maintenance of Exposure Monitoring Equipment: The IH Group develops and revises Standard Operating Procedure for Health & safety meters and dosimeters and maintains the equipment in a state of readiness for use by qualified surveyors from BNL organizations that perform exposure assessments. Portable test equipment used in this program will be calibrated on a basis established in IH51660.
- 6.8 **Reviews or assists in developing training material:** Working in conjunction with the Office of Training and Qualification, the SME for an IH element develops training material and/or reviews curriculum developed by OTQ for completeness and effectiveness in conveying required information.
- 6.9 Site wide support programs:
  - 6.9.1 The IH Group is the main service provider for the following:
    - IHG maintains staffing to support the inventory of chemical containers and Material Safety Data Sheets- Chemical Management System (CMS).
    - Respirator Fit Testing.

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- Heat Stress monitoring at the site level with a pager and web based notification system.
- HEPA Filter Surveillance Testing.
- IH monitoring equipment calibration
- IH sample processing for analysis

Each of these programs is supported by written SOPs for the IHG employees conducting work in these areas.

- 6.9.2 The IH Group augments RCD Facility Support with limited personnel resources for
  - IH monitoring and hazard assessments
  - Some equipment calibration by equipment owned by other organizations.
- 6.10 **Project Design Review for health & safety impact on workers:** The IH Group participates in Project Design Reviews as requested by the SHSD Safety Engineering Group. The person performing the review will follow IH60700. The IH group shall review major construction and renovation projects and include an analysis of potential health & safety exposure from the construction of and intended use of the project. Recommendations shall be made to correct health & safety source before construction activities are commenced.

#### 7.0 <u>Implementation & training</u>

Personnel performing roles in IH program Administration or service delivery to line organizations are to be qualified per the IH Manager using mechanisms described in the corresponding IH element SOPs.

This SOP does not have a Qualification Record as it functions only as a program record.

#### 8.0 References

None

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## 9.0 Attachments None

### 10.0 <u>Documentation</u>

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Prepared By:	Reviewed By / Date:	Approved By / Date:	
(signature/date on file)	(signature/date on file)	(signature/date on file)	
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